In this lesson I'm going gonna show you a sample solution for creating all our drop down menu items in one go by using loops. Either you've used what you've already known about FOR loops or you've watched the last lesson and you've now learned all about Dart FOR loops.

But either way we're going to solve this challenge of taking our list of currencies and converting them into a drop down menu items with text widgets with value properties.

We're going to insert the value of each of those items inside our currency list into one of these widgets right up here.

I'm going to create a new method and I'm going to call it getDropDownItems and it's going to have no inputs but it's going to carry out some functionality.

Now mind you, your particular implementation might differ from the sample solution that I'm providing and that's okay.

Your code and my code doesn't have to match one to one.

If your code works, it works and that's what counts.

So first let me show you an implementation using the C style FOR loop where we create a FOR loop and we create an integer called i, set it equal to zero and then we say that while i is less than the length of our currency's list so for as many items as we've got in here, we could loop through it.

And to access our currency's list of course we have to import our coin data.

So import coin\_data.dart.

And now we can see while i is less than currenciesList.length, so how many values are there in that list,then we're going to increment i by 1 each time to loop through all of the items in that list of currencies.

Now I can print i and see how many times this loop is going to run.

Let's call this function in our build method so that it runs every time we hot reload our app.

So I'm going to call get dropdown items and I'm gonna hit save.

So it runs that code and you can see that it runs it from 0 until 20.

So there's basically 21 items in my currency's list.

Now instead of just printing out i, I can print out the currenciesList, so my list, and then I can provide

i as the index.

So now if I hit save again, what will get printed are each of my currencies in my list of currencies.

And it loops through all of them until it gets to the very end.

And now what I can do is I could use this, so let's create a new string called currency and I can let it equal currencies list at index i, and I could create a new drop down menu item and the child is going to be a text widget which is going to contain that currency as the string.

And also I'm going to set that value property to also be that currency string.

Now I can save this drop down menu item that I've created inside the FOR loop inside a new variable we'll just call it a newItem, set it to equal to that.

And outside of the loop, I can create a list of widgets and this list is going to be called my drop down items and it's going to start out being an empty list.

Now every time we create a new item, we're going to add it to our dropdown items,so dropdown items.add and the new widget is going to be that new item that we created inside the FOR loop.

So now you can see that we've created a empty dropdown list.

We loop through our currencies list and for every currency that's in the list, we create a new drop down menu item.

And inside there we create a text widget where we insert that currency and we also insert it here.

And once that widget's been created, we add it to our list of dropdown items.

So now once my FOR loop has run for every single one of my currencies, so I should have 21 dropdown items in this list,well then I can return this list as the output of this method.

So I'm gonna return the dropdown items and I'm gonna change the return type from void to a list of drop down menu items. And we should also change this dropdown items list to rather be a generic list of widgets to be a list of drop down menu items. And even more specifically, it's actually a list of drop down menu items that will contain strings as their child.

So now that we've created this method which is going to get our drop down menu items, well we can use it down here where we specify the items in our dropdown button.

So instead of having this hard-coded list where we wrote out by hand each of our drop down menu items what we can now call get dropdown items, and if we had save and we take a look at our app, you can see now when we click on our dropdown list, it's got a drop down menu item for each of the currencies in our coin data file. So we can now click on any of these and we can select them and print them into the console.

Now some of you might have chosen a slightly easier way of creating this functionality because instead of using a standard C style FOR loop, we could also use a for in loop.

And let me show you how much easier that looks.

So instead of using int i etc. We're going to create a new string value for each of the currencies inside our currencies list.

And so now we don't have to create this variable here anymore.

It's already been created inside the conditions for our for in loop. Now that we have access to this thing called currency which is going to equal each of the currencies in the list.

We can now use it to create our drop down menu items and we can add them to our dropdown items.

This does exactly the same thing but using less lines of code.

Did you manage to complete this challenge?

Well if not be sure to take a look through the last lesson where we covered the various types of FOR loops in Dart.